



Learning In a Global Society
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1. Introduction

Planet Earth is what ultimately should keep mankind together, because we are fully dependent on its natural and biological resources to survive. It has been calculated that our planet could feed about 10 billion people living as hunters and gathers in a sustainable way (Beek 1992). However, the world population presently amounts about 6 billion people and is still growing. This growth has been possible because of the development of science and technology and we will certainly need a lot of innovative new technology to sustain both planet and mankind now and in the future. During the millennia-long development of mankind different cultures have emerged at different places on earth and those different cultures have found their own solutions to organise the interactions within society and between society and the physical environment. We all depend on natural resources and on biodiversity and we use those to support our daily life in a way that is to a large extent culturally determined. One might – perhaps rather naively – expect that we would, from our different cultural backgrounds, share our experiences to support and conserve system earth but this is certainly not the case. Cultural diversity and the struggle for the share of different societies in natural and biological resources are among the factors that divide us. That process has been going on for centuries, but its effects are increasingly experienced in daily life. Among the reasons for that are demographic developments, the large differences in welfare between different societies and the process of globalisation. Perhaps the fact that we increasingly experience the unsustainability of the present situation in our daily life could help to motivate mankind to organise life in a more sustainable way. This learning for sustainable development is the essence of the UN Decade Learning for Sustainable Development that is to start in 2005.

2. Knowledge in a global society

All societies are knowledge societies. That has always been the case and it most probably will always remain so. In primitive hunting and gathering societies people needed knowledge of their natural environment, knowledge to find food, knowledge to make tools, knowledge about the behaviour of other people. Because of developments in the field of science and technology, civil society and social institutions, our present society has become far more knowledge-intensive and complex. The amount of knowledge needed and available, and the velocity at which it is developed and becomes outdated again is nowadays much greater than in primitive societies. In society knowledge is continuously developed, transported, transferred and applied. In these processes interactions between individuals, knowledge codified in a medium or a product and context-dependent models and perceptions play a role. Therefore knowledge can not be separated from the contexts in which people develop their activities. Knowledge contributes to individual and collective welfare. This too has been true for centuries and will probably be true in the future as well. Not so many new things under the sun thus at first sight, what will the process of globalisation change then?

In western culture there has been a rather strong emphasis on rationality during the past centuries (Dijstelbloem en Schuyt 2002; Marres en de Vries 2002; Allee 2003). We tried to understand our complex physical and social environment using simplified models and schemes, that in their turn allowed for a simplified pattern of reasoning with which the (only) truth could be verified. Subsequently that 'verified truth' could be instrumental for exerting

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power. A pattern of reasoning with an inescapable order of conclusions constitutes an important aspect in laws and regulations. Also in the educational system we find back a lot of notions based on this old-fashioned concept of knowledge. The methods and instruments developed in the past centuries have been and still are valuable, but they will have to be adapted to the changing conditions to remain valuable in the future as well.

Society, because of the complexity of societal problems, not only asks for more specialised knowledge – which remains necessary as a source of inspiration for innovation – but also for methods to apply knowledge in the right way for solving problems. For solving problems almost always an integration of different types of knowledge is needed and that is something a higher education system organised to a large extent along disciplinary lines not effectively prepares for. There is a need for both the 'classical' way of knowledge development in which research is organised in a disciplinary way and quality control is in the hands of peers, and a new way of knowledge development within the context of applications. In those situations there is a need for transdisciplinarity, heterogeneity, input from different stakeholders and a more direct way of societal accounting. This means that there is a need for knowledge development processes in which a broad range of actors are involved. Both ways of knowledge development are needed because we not only need verified knowledge but also societally robust knowledge (Gibbons 1998 and 2003). Furthermore, in our present society complexity increases further because almost all problems also have an international or global dimension. Therefore not only multidisciplinary but also multicultural aspects are stake. This leads to different perceptions, ethical questions and normative judgments. Active participation in a global society asks for the skills needed to work in teams on complex problems. Therefore in addition to (a certain amount of) disciplinary knowledge also competencies are needed. Examples of the latter are competences to look further than the borders of the own field of specialization or culture, to work together with people of different beliefs, to communicate (orally, in writing and via new media), to reflect on the own personal dedication, involvement and performance.

3. Education in a global society

In industrialised countries with the course of time an institutionalised system, the educational system, has originated that prepares people for functioning in society (Dodde 1995). In that system both a preparation for the labour market and knowledge of culture, norms and values are at stake. The rapid development of knowledge in our present society asks for a transition from emphasis on education for children and young adults to emphasis on more flexible forms of life long learning. The process of globalisation adds the necessity to pay attention to the global dimension in individual learning environments in a way that is adequate for the present society and uses the new technological possibilities in a creative way. A general impression is, however, that the broad range of possibilities for innovation made available by ICT developments are used to only a limited extent so far (Kirschner et al. 1997; Kreijns et al. 2002; van Dam-Mieras en de Jong 2002; Kreijns 2004).

Another general observation in relation to ICT is that it contributes to the liberalisation of trade in education. In the past decennia in all western countries the government budget for especially higher education has been reduced in a relative sense. This leads to competition on the market. ICT increasingly makes it possible to enlarge the market for education services via distance education and via local branches or satellite campuses of foreign universities. The competition on a global market is stimulated by liberalising the trade in education via GATS (Mohamedbhai 2003; Moja 2003; UNESCO 2003). Small countries and developing countries will have to deal with a harmonisation of higher education dominated by powerful countries.

4. Reflections on learning in Western societies

In the preceding paragraph the educational system was in focus, we now shift the focus to the learning process. Learning could be defined as an outcome of the process of interaction between an individual and its physical and social environment. The learning process of an individual in a Western society could be described as follows: During early childhood a language is learned that makes possible communication with the social environment. After a

few years the child enters the educational system. During primary and secondary education the child learns to think independently and to function in our complex and dynamic society. Subsequently – during higher or vocational education – the individual specialises in a certain direction determined by among others talent, affinity and labour market conditions (Dam-Mieras 2002). The objective of the learning process could be described as: prepare the individual for functioning in society and on the labour market. In the preceding sections it has been argued that, because of the process of globalisation, both the international dimension and the concept sustainable development should have a place in individual learning environments; within the present educational system this certainly is not the case.

Before giving ideas about how education could be changed to fit better in the context of a global society, it is worthwhile to go back to the origin of education. For Western societies we could choose as a historic starting point the philosophers in ancient Greek culture. Objectives of natural philosophers were to understand the physical environment and the changes taking place in that environment and to think of what is a good life in a moral sense. The methodology they used to develop knowledge consisted of observation, the construction of mental models and confrontation of these models with those of others during discussions. Of course that knowledge could be used to support daily life.

In philosophy two rationalities were discriminated, instrumental rationality and substantial rationality (Kessels et al. 2002). Instrumental rationality is about the best ways to realise objectives; we could call that effectively and efficiency nowadays. Substantial rationality was considered to be a higher level rationality. It was about authentic principles; we could call that norms and values nowadays. Thinking about sustainable development implies both principal and substantial rationality.

5. Education for global citizens

If education has the function to prepare individuals for functioning in society and on the labour market and if both society and labour market are increasingly becoming global, we could perhaps take “old Greek questions” as a starting point for thought about the innovation of Western education to serve global citizens:

- does education give learners the opportunity to understand their physical and social environment?
- does education enable learners to apply that knowledge in society?
- does education offer free space to reflect on common values and principles?

Looking from the perspective of sustainable development my answer to these questions tends to be no.

If learning is considered to be a life long process in a society where the global dimension of society and the need for sustainable development increasingly become clear I think we should reflect on:

- the content of the curriculum, taking into account both the economic function and the cultural function
- the ratio between content and competences
- the institutional supply of the educational system for children and young adults
- the (in)possibility to react on the individual demands of life long learners
- the effectiveness of learning environments and learning processes
- the interaction between formal and informal learning

I think we could state that in a world that becomes more and more connected, the connection of learning environments is lagging behind.

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